

REMARKS

In the outstanding Office Action, the Examiner has rejected claims 2-4 and 9 under 35 U.S.C. 103(a) as being unpatentable over Wolf.

In response to Applicants' previous arguments, the Examiner contends that Wolf discloses a rolling interaction between the coupling and the links since a chain of this type of nature must have some interaction between the rocker pins and the links. In particular, the Examiner contends that it is inherent for the pins to interact with the links when the chains are not following a straight line.

With respect to the claimed ratio of rounded surface radii of curvature of the external surface of coupling and that of the rounded internal surface of the links, the Examiner contends that where the general conditions of a claim are disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art.

Applicants respectfully traverse this rejection based on the following comments. While it may be true that a relative movement between the chain link and the chain pin is "inherent" in the prior art, the Examiner himself states that the prior art contains not even a rudimentary reference to the concepts presented in the claims 2 and 9.

Based on the absence of information in the prior art, the Examiner draws the conclusion that a person skilled in the art would find it obvious to come up with an arrangement like the present invention. If one were to follow the reasoning of the Examiner, none of the geometric features of chains of this type could be called novel because according to the Examiner they would have become obvious as soon as someone had "invented" that a chain can be brought from a stretched-out condition into a curved condition, due to the presence of chain links.

From Wolf's Figure 1, it actually appears that the external surface of the coupling element and the internal surface of the link 1 have the same radius in the area where they are in contact with each other, so that the possibility of varying the radii relative to each other does not suggest itself to a person of ordinary skill in the art. Consequently, claim 2 of the present application cannot be said to be obvious in the sense of 35 U.S.C. 103(a) in light of the Wolf '583 reference. It is therefore respectfully requested that the rejection of claim 2 be withdrawn and that claim 2, as well as its dependent claims 3 and 4, be allowed.

Applicants respectfully contend that the claimed ratio recited in the claims is not a mere optimization step or simply a matter of design choice since the prior art fails to disclose or even suggest the claimed structure.

With respect to claim 9, Applicants respectfully traverse the rejection of this claim for the same or similar reasons as to why claim 1 should be allowed. In particular, the Examiner has admitted that the features of claim 9 are clearly not disclosed in the Wolf reference but it would be obvious to discover optimum ranges. However, this type of argument would severely restrict patentable improvements since Applicants have discovered and set forth a different structure and not merely an optimized range. Satisfaction of the equation set forth in claim 9 by the Wolf device is entirely lacking and Applicants respectfully submit that the equation and other feature set forth in claim 9 represent a concept or feature that is not contemplated in the Wolf reference and is more than a mere optimization of a range.

Applicants have added claims 14-16 and respectfully request consideration and allowance of these claims. Claim 14 recites a link chain similar to the one recited in claim 1 but with the exception that claim 14 includes the feature that the radii of curvature of one of said internal surfaces and said external surfaces is variable since it gradually changes over the length of the surface.

Applicants respectfully submit that the features of claim 14 are neither disclosed nor suggested in the prior art references since at best, the prior art reference appears to show a uniform

Claim 15 recites a link chain in which at least some of the plates have elongated windows with end sections for the respective coupling elements. The window also has an intermediate section that is provided between the two end sections. The windows are shaped to prevent displacement of the coupling units from the respective end sections into the intermediate section. In the Wolf reference, there is merely an opening (e.g., circular opening) that receives the coupling elements.

In other words, the “window” or opening of Wolf does not have the shape of the window recited in claim 15 since the Wolf window does not contain end sections where the coupling elements are located and retained by means of the window shape. In particular, the shape of the window is such that the coupling elements that are received in the end sections are prevented from traveling or moving into the intermediate section. Claim 16 further describes the shape of the window and the feature that prevents movement of the coupling elements from the end sections to the intermediation section. More specifically, claim 16 recites that the plate includes projections that extend into a respective elongate window and define the end sections and in part define the radius of curvature of the rounded internal surface. Once again, Applicants respectfully submit that the cited Wolf reference does not include these features since it once again merely teaches providing an opening into which the pins are disposed as opposed to forming projections that extend into the window so as to partition the window into the end sections that receive and retain the coupling elements as is clearly shown in the drawing figures and described in the present specification. The surface that includes the claimed radii of curvature is in part defined by the projection that extends into the window. Such a feature is completely absent in the cited reference.

Since these features are neither described nor suggested in any way in the Wolf reference, newly added claims 15 and 16 should be passed allowed and passed to issue.

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In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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